

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

<b>WSOU INVESTMENTS, LLC D/B/A</b>	§	
<b>BRAZOS LICENSING AND</b>	§	<b>CIVIL ACTION 6:20-cv-01163-ADA</b>
<b>DEVELOPMENT,</b>	§	<b>CIVIL ACTION 6:20-cv-01164-ADA</b>
<i>Plaintiff,</i>	§	<b>CIVIL ACTION 6:20-cv-01165-ADA</b>
	§	<b>CIVIL ACTION 6:20-cv-01166-ADA</b>
<b>v.</b>	§	<b>CIVIL ACTION 6:20-cv-01167-ADA</b>
	§	<b>CIVIL ACTION 6:20-cv-01168-ADA</b>
<b>SALESFORCE.COM, INC.,</b>	§	<b>CIVIL ACTION 6:20-cv-01169-ADA</b>
<i>Defendant.</i>	§	<b>CIVIL ACTION 6:20-cv-01170-ADA</b>
	§	<b>CIVIL ACTION 6:20-cv-01171-ADA</b>
	§	<b>CIVIL ACTION 6:20-cv-01172-ADA</b>

**SALESFORCE’S OPENING CLAIM CONSTRUCTION BRIEF**

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## I. INTRODUCTION

Despite asserting over 100 claims from ten unrelated patents<sup>1</sup> in various technical fields of computing and telecommunications, WSOU Investments, LLC (“WSOU”) has taken the position that *not a single term* in any of these ten patents needs construction. WSOU takes this position despite numerous express definitional statements and disavowals of claim scope across the patents’ respective intrinsic records, all of which WSOU ignores. Instead, WSOU’s approach to claim construction would abrogate the *Markman* process—it seeks to avoid any meaningful constructions that would inform the jury as to the meaning of claim terms or resolve disputes between the parties as required by the Federal Circuit in *O2 Micro*. By contrast, salesforce.com, inc.’s (“Salesforce”) constructions are grounded in the intrinsic evidence and reflect the appropriate understanding of a person of ordinary skill in the art (“POSITA”) in view of that evidence. Accordingly, WSOU’s proposed wholesale “plain and ordinary meaning” approach should be rejected, and Salesforce’s constructions adopted.

## II. LEGAL STANDARD

Claim construction always begins with the intrinsic record, including the claim language, the specification, and the prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1321 (Fed. Cir. 2005). Extrinsic evidence may also be consulted, but must be considered “in the context of the intrinsic evidence.” *Id.* at 1319.

It is the Court’s role to resolve disputes regarding the scope of the asserted claims. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008). “[T]he

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<sup>1</sup> The patents-in-suit are U.S. Patent Nos. 7,551,731 (the “731 patent”), 8,209,411 (the “411 patent”), 8,280,928 (the “928 patent”), 8,335,819 (the “819 patent”), 8,369,827 (the “827 patent”), 8,391,892 (the “892 patent”), 8,923,899 (the “899 patent”), 9,088,493 (the “493 patent”), 9,277,060 (the “060 patent”), and 9,336,320 (the “320 patent”) (collectively, the “asserted patents”).

court’s obligation is to ensure that questions of the scope of the patent claims are not left to the jury.” *Every Penny Counts, Inc. v. Am. Express Co.*, 563 F.3d 1378, 1383 (Fed. Cir. 2009). Thus, “plain and ordinary meaning” constructions fail to resolve disputes regarding claim scope:

[R]eliance upon the phrase “plain and ordinary meaning,” or a determination that the claim terms require “no construction,” would offer little in terms of facilitating a resolution of these related actions. Stated differently, a blanket resort to the “ordinary” meaning of the disputed claim terms would leave unresolved the parties’ disputes, and would largely negate the importance of the claims construction process—a phase of patent litigation specifically directed at determining claim scope in view of the patents-in-suit.

*Baxter Healthcare Corp. v. MyLan Labs. Ltd.*, 346 F. Supp. 3d 643, 653 (D.N.J. April 5, 2016).

### III. DISPUTED TERMS<sup>2</sup>

#### A. The ’819 patent

The ’819 patent relates to a method “for providing client-side caching in network communications.” Ex. 819-1, ’819 patent, Abstract. The ’819 patent acknowledged that client-side caching was already a well-known method of improving user experience by providing session persistence for network services, thereby:

enabl[ing] client devices to locally store information for authenticating, session tracking (e.g., state maintenance), etc., and for remembering specific information about users such as service preferences, browsing history, previous activities, and the like. This information can then be used to provide continuity in a user’s service experience when the user begins a service session (e.g., a web browsing session) and then resumes the session at a later time.

*Id.*, 1:13-21.

At the time of the purported invention, “using cookies [wa]s one of the most popular methods of storing client-side persistence data,” with cookies “consist[ing] of one or more [variable] name-value pairs containing limited bits of information such as user preferences,

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<sup>2</sup> Salesforce maintains that construction of all terms briefed herein is required as there is a clear dispute between the parties as to exactly what each term means. *O2 Micro*, 521 F.3d at 1360.

shopping cart contents, an identifier for a server-based session, or other data used by website.” *Id.*, 3:53-54, 58-61. Another way of storing such information on a user device was storing it within “a scripting file [that] is cached at a user device (e.g., by a browser application of the user device),” where the scripting file “is embedded in web content . . . and cached with the accompanying web content.” *Id.*, 4:15-17, 21-23. The ’819 patent criticizes this use of scripting files for client-side caching as generally limited to providing “*static* persistence information stored in global variables that cannot be changed or deleted.” *Id.*, 4:11-14; *see id.*, 4:15-30. The ’819 patent purports to improve the use of scripting files for client-side caching by making them updateable. *See id.* at 4:30-33. These updates entail updating session variables on the server and then sending the scripting file to the device. *See id.* at 1:47-50; 2:35-39; 5:25-31. Moreover, since session variables must be initialized before they can be updated, the ’819 patent discloses distinguishing between a “first time request” for a scripting file accompanied by initial collection of session variables and subsequent requests. *See id.* at 5:12-18; *see also* Schmidt Decl. ¶¶ 46-56, 66-68; *see also* Ex. A.

# 1. “first time request” (Claims 1, 8, 16)

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
“a request before a client-side persistency file has been created or a request where no previous session information exists”	Plain and ordinary meaning.

The parties dispute whether “first time request” should be construed in accordance with the inventor’s lexicography. Salesforce’s construction is consistent with the inventor’s express definition of “first time request” in the specification, the claim language, and embodiments of the invention. In contrast, WSOU’s construction would improperly broaden the scope of “first time request” under the guise of plain and ordinary meaning.

Here, the patentee chose to be its own lexicographer with respect to the term “first time request” by expressly defining it in the specification. In particular, the specification states:

In one embodiment, when the session client 111 of the UE 101 accesses the scripting file as referenced in the requested web content, the scripting file causes the client persistency module 107 to determine whether the request is a ***first request*** to access the content (***i.e., a request before a client-side persistency file has been created or a requests where no previous session information exists***).

Ex. 819-1, 5:6-12 (emphasis added). The patentee’s use of “i.e.” denotes it was acting as its own lexicographer. *See SkinMedica, Inc. v. Histogen Inc.*, 727 F.3d 1187, 1200 (Fed. Cir. 2013).

The surrounding claim language further reinforces Salesforce’s construction of “first time request.” The ’819 patent’s independent claims recite that “if the request is a first time request, [the claimed invention] collect[s] session configuration information for the web content from the device, specif[ies] session variables in the scripting file based on the session configuration information, and initiat[es] a subsequent request for the scripting file.” Ex. 819-1, 22:20-24; 22:65-23:2; 24:11-15. The claims’ recitation of collecting session configuration information and specifying session variables if a request is a “first time request” is consistent with Salesforce’s construction that a “first time request” is a request where no previous session information exists.

Finally, Salesforce’s construction is also consistent with other embodiments disclosed in the specification. For example, in one embodiment, “the detection and differentiation of the second request causes . . . the client-side caching module 107a to complete the scripting file creation process . . . .” *Id.*, 5:26-28. The creation of the scripting file ***after*** the detection of the second request aligns with Salesforce’s construction that a “first time request” is a request that existed before a client-side persistency file has been created.

Compared to Salesforce’s construction, WSOU’s proposed construction of plain and ordinary meaning should be rejected because it is well settled that “[w]hen a patentee explicitly defines a claim term in the patent specification, the patentee’s definition controls.” *Nestle USA, Inc. v. Steuben Foods, Inc.*, 686 F. App’x 917, 919 (Fed. Cir. 2019) *Sinorgchem Co., Shandong*

*v. Int’l Trade Comm’n*, 511 F.3d 1132, 1136 (Fed. Cir. 2007) (holding that a disputed claim term should have been interpreted as having the definition set forth by the patentee in the specification).

## 2. “scripting file” (Claims 1-2, 5, 7-9, 12, 14, 16-17)

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
“file written in a scripting language that is interpreted at runtime instead of being compiled into machine language instructions”	Plain and ordinary meaning.

The parties dispute whether “scripting file” needs to be construed. A construction of “scripting file” will assist the jury evaluate the parties’ claims and defenses, and Salesforce’s proposed construction best reflects a POSITA’s understanding of the term in view of the intrinsic record and extrinsic evidence.

A POSITA would understand that the recited “scripting file” must be a file written in one or more scripting languages. *See* Schmidt Decl. ¶¶ 114-116. Looking at the claim language, a POSITA would understand that the term scripting file relates to a file written in a scripting language, which term had a well-established meaning in the field of computer science—*i.e.*, programming languages that are interpreted at runtime and not compiled into machine code. *See id.* ¶¶ 116; Ex. 819-2 (“scripting”). The claim further recites that the scripting files support “client-side caching” by storing “specif[ied] session variables.” Ex. 819-1, 22:15-16, 22. Consistent with this express limitation, the specification further explains that that this claimed functionality of “caching . . . is based on *scripting languages (e.g., JavaScript)*” and that these “session variables . . . can even be functions of a programming language (e.g., *JavaScript*).” *Id.*, 4:11-12; 14:54-56 (emphasis added). The specification goes on to assert that “[b]asing the session variables *on a scripting language* advantageously enables the scripting file to support a greater variety and quantity of client-side persistency functions.” *Id.*, 14:56-59 (emphasis added).

In comparison, WSOU’s construction of “scripting file” should be rejected because it relies



on an unstated and undefined plain and ordinary meaning that would not be apparent to a lay jury absent claim construction. *See Sulzer Textile A.G. v. Picanol N.V.*, 358 F.3d 1356, 1366 (Fed. Cir. 2004); *AFG Indus., Inc. v. Cardinal IG, Co.*, 239 F.3d 1239, 1247 (Fed. Cir. 2001).

## **B. The '827 patent**

The '827 patent" is directed to managing a mobile telecommunications networks servicing multimedia demands built upon existing voice networks that, in particular, uses a Subscriber Profile Repository ("SPR") in an LTE communications network. More particularly, as noted in the specification, at the time of the '827 patent, "the 3<sup>rd</sup> Generation Partnership Project (3GPP) ha[d] recently promulgated a new network scheme it term[ed] 'Long Term Evolution' (LTE)." Ex. 827-1, 1:29–32. "In an LTE network, all communications are carried over an IP [Internet Protocol] channel from user equipment (UE) [i.e., a mobile phone] to an all-IP core called the Evolved Packet Core (EPC)." *Id.*, 1:32–35. As specified in various 3GPP standards, this EPC core further included a component called an SPR. *See id.*, 1:38–45. The specifications further defined how the various elements of the EPC, including the SPR, "interact in order to provide reliable data services and charge subscribers for use thereof." *Id.*, 1:45–48.

The '827 patent identifies purported issues with the implementation of the SPR, including, that the 3GPP specifications "do not specify the SPR's relation to any existing subscriber data base." *Id.*, 1:52–53. Accordingly, the '827 patent proposed systems and methods to "quickly resolve requests" to the SPR, including "determining a unique subscriber record from a set of subscription identifiers." *Id.*, 1:58–61. This method for demining a unique subscriber record is laid out in Figure 5. As disclosed therein, a request is received at the SPR via an SP interface. *Id.*, 8:46–52. The SP interface extracts subscriber identifiers, and a search manager within the SPR queries a subscriber database within the SPR for subscriber records matching the subscription identifiers. *Id.*, 8:46–52, 9:14–22. A results manager within the SPR then determines whether the

“subscriber records in the list of found subscriber records consistently identify a unique subscriber record.” *Id.*, 9:60–10:5; *see also* Schmidt Decl. ¶¶ 60-62.

### 1. “Subscriber Profile Repository (SPR)” (Claim 1, 14)

Salesforce’s Construction	WSOU’s Construction
“a logical entity containing all subscriber/subscription related information needed for subscription-based policies and Policy and Charging Control rules as defined by the 3GPP standard”	Plain and Ordinary Meaning

Salesforce’s proposed construction aligns with claim language, specification, and the meaning of SPR as a term of art in the field of the ’827 patent—the 3GPP standards for LTE.

First, the preamble (including its use of the SPR) is limiting, as it provides a technical framework for how the claim is to be performed. *See Knowles Elecs. LLC v. Cirrus Logic, Inc.*, 883 F.3d 1358, 1363 (Fed. Cir. 2018); *see also Eli Lilly & Co. v. Teva Pharms. Int’l GmbH*, 8 F.4th 1331, 1341 (Fed. Cir. 2021); *SIMO Holdings Inc. v. Hong Kong uCloudlink Network Tech. Ltd.*, 983 F.3d 1367, 1375 (Fed. Cir. 2021). The preambles provide both context to and the purpose of the claim (“determining a unique subscriber record”), as well as an important structural characteristic of the claimed invention (“performed by a Subscriber Profile Repository (SPR)”). Indeed, without SPR being limiting, the patent claims would not “provide SPR and method for processing requests to the SPR” and would not satisfy the alleged “need for an SPR that is interoperable with different network devices.” Ex. 827-1, 1:57–58, 66–67.<sup>3</sup> Further, the preamble provides an antecedent basis for “unique subscriber record” and “subscription identifiers,” further counseling in favor of finding the preamble limiting. *See Bio-Rad Labs., Inc. v. 10X Genomics*

<sup>3</sup> Plaintiff itself implicitly conceded in its Opposition to Salesforce’s Motion To Dismiss (Dkt. 20) that the term SPR is necessary to breathe life and meaning to the claim, arguing that “the method must be ‘performed’ by the ‘Subscriber Profile Repository,’” Dkt. 25. *MTD OPP* at 7. Likewise, WSOU appears to concede that that term is limiting in its proposed constructions. *Cf.* WSOU’s Proposed Claim Construction ’928 “directory” (“This Preamble term is not limiting”) with ’827 “Subscriber Profile Repository (SPR)” (“Plain and ordinary meaning”).

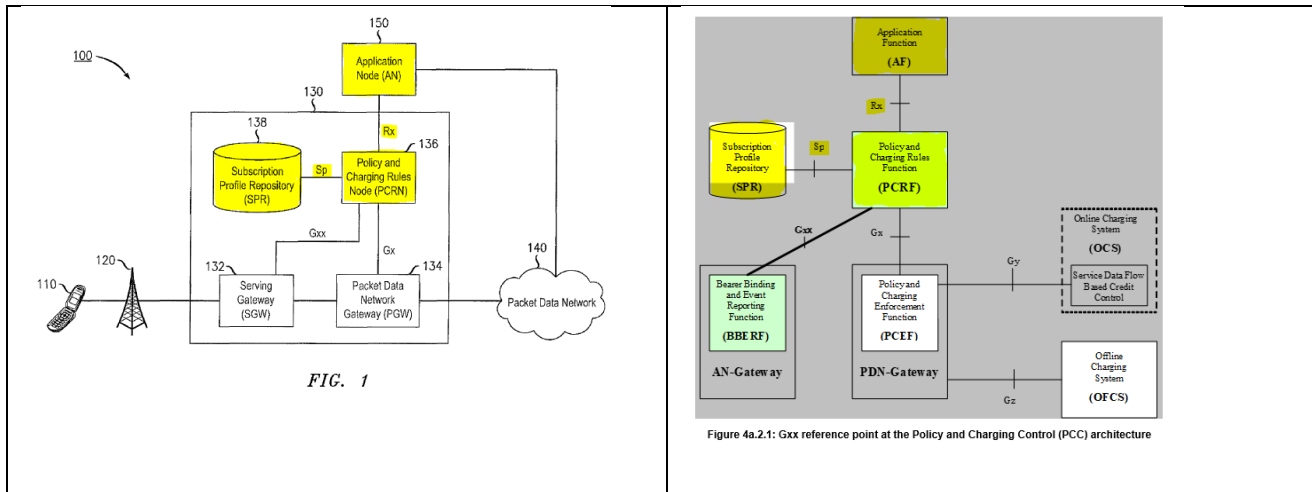
*Inc.*, 967 F.3d 1353, 1371 (Fed. Cir. 2020).

More particularly, the claim uses the term “Subscriber Profile Repository (SPR).” A POSITA would understand that this exact expression of the term, with capitalization of the first letter in each word followed by the acronym ‘SPR’ necessarily refers to the SPR as defined in the 3GPP standards for LTE. Ex. A, Schmidt Decl. ¶ 87-88. These standards define the SPR as follows: “The SPR logical entity contains all subscriber/subscription related information needed for subscription-based policies and IP-CAN bearer level PCC rules by the PCRF.” Ex. 827-2 at § 6.2.4, Schmidt Decl. ¶ 89-90. This definition is universally recognized across the industry. Schmidt Decl. ¶ 86-92; *e.g.*, Ex. 827-3 at 276 (“The Subscriber Profile Repository (SPR) is the database that was originally defined to hold subscription data for the PCC framework. . . . the subscription-related information that is needed by the PCRF to perform policy control is very much dependent on the services that the operator provides to its end-users.”).

The ’827 patent’s specification further confirms that the term SPR is to be understood according to the 3GPP standards for LTE. Schmidt Decl. ¶ 89. First, the very “Background” of the invention section explains “3GPP TS 29.212, 29.213, and 29.214 specifications provide some guidance on PCC rule creation based on information contained in the *SPR*.” Ex. 827-1, 1:49–51. As further described therein, “to provid[ing] SPR and method for processing requests to the SPR.” *Id.*, 1:57–58. This is necessary because, as the specification explains, in an LTE network “all communications are carried over an IP channel . . . to an all-IP core” where the SPR provides information for PCC rule creation. *Id.*, 1:32–35.

Indeed, an examination of the figures used in the ’827 patent and the 3GPP specifications likewise confirms that the disclosure related to the implementation of the SPR as defined by the LTE standard, connecting it to the same specific series of objects (the Policy Charging Rules object

and Application object) via the same connectors (the SP and Rx), each of which are all also particular to LTE. Cf. '827 Fig. 1 with Ex. 827-4 at Fig. 4.3; Schmidt decl. ¶ 90.



Moreover, the specification refers to the context and implementation of the inventions described therein as directed to the 3GPP standards. *See, e.g.*, Ex. 827-1, 3:49–54; 3:29–33; 3:49–51. This consistent use further aligns with the definition of SPR provided by the 3GPP. Schmidt Decl. ¶ 89. The '827 Patent provides that the SPR is a component of the Policy and Charging Rules Node (PCRN). Ex. 827-1, 4:15–50. The SPR stores “indications of subscription information for each subscriber such as, for example, bandwidth limits, charging parameters, subscriber priority, and subscriber service preferences.” *Id.*, 4:46–50. This data is precisely the kind of “information needed for subscription-based policies and Policy and Charging Control rules as defined by the 3GPP standard.” *See* Ex. 827-4 at §4.5.5.3 (explaining the use of Policy and Charging Controls to manage maximum authorized bandwidth).<sup>4</sup> Salesforce’s proposed construction best aligns with the intrinsic record and 3GPP standards expressly relied on therein.

### C. The '928 patent

<sup>4</sup> The '827 patent references the same functionality with the same terminology. Cf. Ex. 827-1, 1:50–52, 3:44–54, 4:15–26 (describing PCC rule creation, use of the PCRN with the Sp interface in an EPC to manage bandwidth usage) *with* 827-4 at §4.5.5.3 (same terms describing same function).

The '928 patent relates to a method for creating a multi-level enmeshed directory structure. Ex. 928-1, Abstract. In a “simple” or “conventional” directory structure, an object is associated with a unique descriptor (such as a filename contained in a directory), which can then be recursively associated with another higher-level descriptor. *Id.*, 1:31–34. Thus, a hierarchical descriptor structure is realized (such as a file system directory), wherein there is a unique chain of hierarchically ordered descriptors that lead to an object. *Id.*, 1:35–37. In particular, one can infer only one path by a descriptor traversal starting from the object itself. *Id.*, 1:39–41.

In contrast, the '928 patent purports to introduce a novel method for building hierarchies of descriptors. In what it refers to as a “multi-level enmeshed directory structure,” multiple descriptors may describe a single data object, each descriptor may in turn also have multiple descriptors, and the descriptors may be linked to each other across multiple levels. The result is a multi-level interwoven mesh of descriptors creating many paths to any data object. *Id.*, 1:58–62.

As shown in Fig. 3, the resultant enmeshed directory structure contains four levels. Each of a plurality of objects denoted as 310-1 through 310-12 (collectively objects 310) is linked to one or more of eight descriptors (A5-A8; B4-B7) at a first hierarchical level, denoted as level 320. *Id.* 4:59–62. Each of the descriptors at the first hierarchical level 320 is linked to one or more of six descriptors (A2-A4; B2-B3) at a second hierarchical level 330. *Id.* 4:62–65. Each of the descriptors at the second article level 330 is linked to one or more of two descriptors (A1; B1) at a third hierarchical level 340. *Id.* 4:65–67. Thus, a hierarchical descriptor structure is provided that can be used to describe objects in multiple ways. *Id.* 5:8–10. There are at least two paths to object 310-11 from descriptor B1, *id.* 5:10–11: (1) 340-B1 → 330-B3 → 320-B6 → 310-11 and (2) 340-B1 → 330-B3 → 320-B7 → 310-11, *id.* 5:12–13; *see also* Schmidt Decl. ¶¶ 57–59.

#### 1. “directory” (Claims 1, 13)

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
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“An entity in a file system which contains a group of files and/or other directories”	This Preamble term is not limiting
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As a preliminary matter, although the term “directory” appears in the preamble, it is limiting. “Directory” recites an essential structure to the very concept of the invention. *See Knowles Elecs*, 883 F.3d at 1363; *Eli Lilly*, 8 F.4th at 1341; *SIMO Holdings*, 983 F.3d at 1375. The ’928 patent is titled “Multi-Level Enmeshed **Directory** Structures”; the field of the invention defines that the invention “relates to **directory** structures in general and, in particular, to a multi-level enmeshed **directory** structure.” (emphasis added)). *See, e.g.*, Ex. 928-1, 1:6–7 (emphasis added). The specification repeatedly describes the patent within the context of these “directory structures.” *See, e.g., id.*, 1:58–2:2, 2:51–53; 3:50–54; 4:27–46; 4:57–67; *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1358 (Fed. Cir. 2012). The preamble is limiting because the term “directory” therein serves as antecedent basis for a number of limitations in the independent and dependent claims. *See, e.g.* Cl. 1, 13 (“hierarchical structure linking the different levels of descriptors” refers back to the “a multi-level hierarchical directory structure.”); Cl. 5, 13 (reciting “navigat[ing] the enmeshed *directory* in both directions.”); *Bio-Rad Labs*, 967 F.3d at 1371.

Salesforce’s construction derives directly from the intrinsic evidence, and reflects the understanding of this claim term to one of ordinary skill in the art in view of that disclosure. *See* Ex. A, Schmidt ¶¶ 75-77. In particular, the patentee here acted as a lexicographer, defining the term directory in the Background of the invention section as follows: “[A] directory is an entity in a file system, which contains a group of files and/or other directories.” Ex. 928-1, 1:25–27. Such use of the term “is” is the quintessential mechanism by which a patentee act as his own lexicographer. *See Scripps Rsch. Inst. v. Illumina, Inc.*, 782 F. App’x 1018, 1022 (Fed. Cir. 2019) (finding use of the term “is” in the specification statement “a *is* an integer as described previously to connote the number of chemical unit identifiers in the oligonucleotide” demonstrated patentee acted as a

lexicographer).

**2. “identifying a single initial descriptor that links a plurality of descriptors and two or more predecessor descriptors linking another single descriptor” (Claims 1, 13)**

<b>Salesforce’s Proposed Construction</b>	<b>WSOU’s Proposed Construction</b>
“identifying a single initial descriptor in a first level of the hierarchy, the single initial descriptor linked to a plurality of descriptors in a second level of the hierarchy, the plurality of descriptors linked to two or more predecessor descriptors in a third level of the hierarchy, and the two or more predecessor descriptors linked to another single initial descriptor that is in a fourth level of the hierarchy”	Plain and ordinary meaning

Salesforce’s construction is grounded in the claim language and the patentee’s express disclaimer and definitional statements in the file history directed to this particular limitation. By contrast, WSOU’s “plain and ordinary meaning” ignores that intrinsic record.

More particularly, the claim language of this limitation itself reflects that the resultant claimed directory structure is a “multi-level hierarchical” structure comprising four different types of descriptors: “a single initial descriptor,” “a plurality of descriptors,” “two or more predecessor descriptors,” and “another single descriptor,” which are all linked in a particular way. Ex. 928-1, claims 1 and 13. As described above in the patent background, the ’928 patent is directed to a multi-level enmeshed directory structure. As also described above, a person of ordinary skill would understand the directories of the directory structure to be entities in a file system that contain a group of files and/or other directories. A person of ordinary skill would naturally understand that the multi-level hierarchical structure includes different levels of directories and subdirectories. In particular, if a directory is linked to a directory in a hierarchical level above that directory, it is a subdirectory of the directory to which it is linked. Schmidt ¶ 78-79.

In view of the claim requiring that the hierarchical structure have multiple levels, a

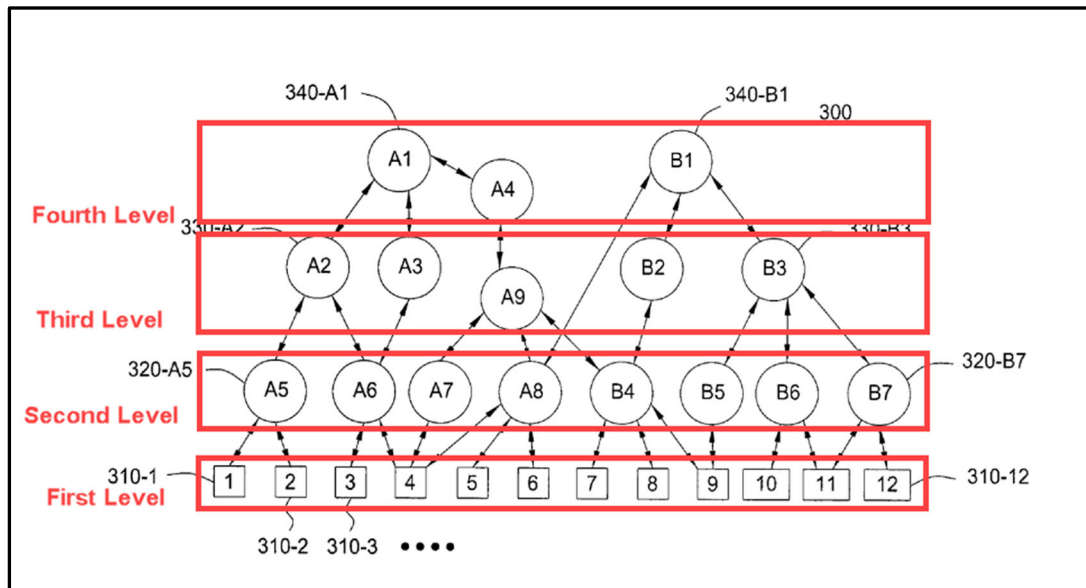
POSITA would naturally understand that the “single initial descriptor” is on a first level of the hierarchy, which corresponds with the “initial data objects” 310-1 through 310-12. The “plurality of descriptors” are on a second level of the hierarchy, the “two or more predecessor descriptors” are on a third level, and the “another single descriptor” is on a fourth level. Schmidt ¶ 80.

Critically, Salesforce’s construction of this limitation follows from the prosecution history, where the applicant made arguments to overcome the prior art and, in so doing, expressly characterized the claimed invention to distinguish that art. More particularly, the claims of the application that led to the ’928 patent, as originally filed, recited only three hierarchical levels. In response to a non-final rejection and to overcome prior art, the applicant amended claims 1 and 13 to include, in the limitation at issue, a fourth level of the hierarchal directory structure by further defining the relationships between the four levels (as is present in the claim limitation as issued). *See* Ex. 928-4 at 9 (’928 FH, November 23, 2011 Applicant Amendment). The applicant then argued that the prior art at issue did not meet this amended limitation, but the Examiner found these arguments unpersuasive. *See* Ex. 928-5 at 3–4 (’928 FH, January 11, 2012 Final Rejection).

The applicant then filed an appeal brief, in which applicant expressly characterized this claim limitation, arguing based on a direct mapping to this limitation that “*[a]s claimed, there are at least four levels to the hierarchy*; namely, ([level] 1) an initial descriptor . . . that ([level] 2) links a plurality of descriptors . . . and ([level] 3) two or more predecessor descriptors . . . linking ([level] 4) another single descriptor.” Ex. 928-6 at 13 (’928 FH, March 14, 2012 Appeal Brief) (emphasis added). Accordingly, the prosecution history expressly requires, based on applicant’s characterization of the claim in an attempt to overcome the prior art, that the claimed structure as reflected in this limitation consist of four hierarchical levels wherein the “initial descriptor” (e.g., one of 310-1 through 310-12) is at the first level; the “initial descriptor” is linked to a “plurality of



descriptors” (e.g., two or more of A5, A6, A7, A8, B4, B5, B6, and B7) at the second level; the “plurality of descriptors” are linked to “two or more predecessor descriptors” (e.g., A2, A3, A9, B2, and B3) at the third level; and the “plurality of descriptors” are linked to “another single descriptor” at the fourth level (e.g., A1, A4, B1). *Id.*; see, e.g., *SpeedTrack, Inc. v. Amazon.com*, 998 F.3d 1373, 1378 (Fed. Cir. 2021). These four hierarchical levels as recited in the file history’s characterization of this claim limitation are illustrated below, see Schmidt ¶ 85:



The specification likewise described a four level hierarchy in accordance with the statements in the file history. As described therein, each “link between [a] descriptor and its predecessor is denoted as a ‘proper link’, indicating that the descriptor is a ‘proper subset’ of its predecessor such that everything described by this descriptor is also described by the predecessor.” *Id.*, at 5:4–8. Correspondingly, the claimed linking between descriptors requires that each link be between different levels in the hierarchy.

In addition, the specification specifically refers to the claimed four levels of the hierarchy. *Id.* at 4:57–67, “each of a plurality of objects (collectively objects 310) is linked to one or more of eight descriptors (A5-A8; B4-B7) at a **first hierarchical level**, denoted as level 320. Each of the

descriptors at the first hierarchical level 320 is linked to one or more of six descriptors (A2-A4; B2-B3) at a **second hierarchical level** 330. Each of the descriptors at the second article level 330 is linked to one or more of two descriptors (A1; B1) at a **third hierarchical level** 340. As discussed below, these first, second, and third hierarchical levels in the specification correspond to the claimed second, third, and fourth hierarchical levels. The claimed first hierarchical level corresponds to the level of objects (level 310). A person of ordinary skill in the art would understand that this level of objects is the first level of the hierarchy and the described first, second, and third levels in the specification are actually the second, third, and fourth levels, which the patent applicant confirmed during prosecution (discussed below). Schmidt ¶ 81.

#### **D. The '493 patent**

The '493 patent is generally directed to “retrieving timing information relating to usage by a user of one or more online services” in order to “determine[e] a pattern of consistent usage from the timing information,” and based on this information, “generat[e] scheduling information for transmission of a message based on the determined pattern.” Ex. 493-1, 1:30-36; Abstract 1-6.

As described therein, online services (such as a shopping website, a social networking service, or a streaming music service) “have emerged as a key vehicle for commerce.” *Id.*, 2:49–56. These online services “may find it beneficial to send a message to the user to convey an advertisement, a survey, or other information.” However, the '493 patent notes that a key issue is the timing of these messages, *i.e.*, “[w]hen sending messages by an online service to a user, sending messages at the appropriate time of day would be more effective; that is, when the user is receptive to such information.” *Id.*, 2:57–62. “During the scheduled appropriate time, the user is more likely to be amenable to receiving messages relating to the particular online services. By contrast, if the online service sends a message (e.g., text message) to a user late at night, the user may not be available, and thus, the message is ineffective.” *Id.*, 3:5–9; *see generally id.*, 3:5–30.

To address this purported issue, the '493 Patent discloses “an online service tracking platform ... to determine appropriate times to send messages to users of one or more online services ....” As further disclosed therein, “the appropriateness of the schedule or time can be based on whether the schedule is consistent with the user’s use of the online services. A schedule is consistent with the user’s use of the online service ... if collected information about the user’s usage is free from variation to a certain degree for a certain time window.” *Id.*, 2:65–3:3; *see also* Ex. A, Schmidt ¶¶ 63-65.

**1. “[A] login of the user with one of the one or more online services” (Claims 1, 5)**

<b>Salesforce’s Proposed Construction</b>	<b>WSOU’s Proposed Construction</b>
“an entering of user information in order to access an online service”	Plain and ordinary meaning

Salesforce’s construction reflects the understanding of a POSITA in view of the express claim language and the disclosure of the specification. By contrast, WSOU’s unspecified plain and ordinary meaning construction would leave open disputes between the parties as to this claim term, including as to whether any access of an online service, regardless of whether that access is associated with user information, could constitute the claimed login.

First, a POSITA would understand the term “login” as the initiating process by which a user first “identifies herself or himself to a system” to gain access to a particular service. Ex. 493-2. As recited in the claims, each login to an online service must be associated with user information. More particularly, independent claims 1 and 5 require “collecting timing information relating to usage by the user.” Ex. 493-1, Cls. 1, 5. This timing information “is associated with a login of the user with one of the one or more online services.” *Id.* Accordingly: (1) the claims require an association of timing information with a particular login by a particular user, and (2) the timing information is collected based on the user’s use of one particular service of the one or

more online services corresponding to that login.

Consistent with the use of the term login in the claims as would be understood by a POSITA, the specification makes clear that a login is a process, that is separate from and takes place after registration, by which the user is authenticated with a particular online service in order to gain access to the service. More particularly, as described in the specification in the context of service interface module 201, a login is the process of authenticating a user to use a particular online service: “the service interface module 201 can be used to authenticate a user with the online service 103.” Ex. 493-1, 7:20–22 *see generally id.* at 7:12–35 (“[O]nce registration is complete, the runtime module 207 can ***allow the user access to the online service 103 once the user authenticates with the online service 103*** via the service interface module 201.”) (emphasis added). As a POSITA would understand, such authentication necessarily requires some entry of user information into the system for the purpose of authentication. Ex. A, Schmidt 93-98.

Moreover, each login is associated with a particular access to an online service after registration. For example, as explained in the context of Fig. 4, the registration of the user with the service takes place at a particular time, designated by data point 401 below. After this initial registration process, each time the logs into the system, the timing of that login is recorded, as reflected by data points “403, 405, 407 [which] ***represent the login times of the user*** on the corresponding days.”). Ex. 493-1, 12:34–40.

2. The terms “determining ... a pattern of consistent usage from the timing information” (Claims 1, 5) and “a consistency of the determined pattern of consistent usage” (Claims 1, 5) are indefinite

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
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<p><b>“determining ... a pattern of consistent usage from the timing information”</b></p> <p>Indefinite, or, in the alternative,</p> <p>“determining, based on applying a set of predefined rules to the timing information, that the user's usage of an online service is free from variation to a certain degree for a certain time window”</p>	<p>Plain and ordinary meaning</p>
<p><b>“a consistency of the determined pattern of consistent usage”</b></p> <p>Indefinite, or, in the alternative,</p> <p>“the extent to which the previously determined pattern of consistent usage is within a certain tolerance range or time window based on the predefined rules applied to the timing information”</p>	<p>Plain and ordinary meaning</p>

The term “a pattern of consistent usage” in this limitation is indefinite, as it fails to inform a POSITA, with reasonable certainty, of the scope of the invention. *See Nautilus*, 572 U.S. at 901.

As a preliminary matter, the term “pattern of consistent usage” does not have a well understood meaning to one of skill in the art, but rather, is a term coined for the purposes of the ’493 patent. *Schmidt* ¶¶ 91-113; *IQASR LLC v. Wendt Corp.*, 825 F. App’x 900, 904 (Fed. Cir. 2020) (“When a term ‘has no ordinary and customary meaning,’ it is a ‘coined term,’ raising the question of whether the intrinsic evidence provides objective boundaries to the scope of the term.”) (citations omitted). Accordingly, a POSITA must consider the disclosure of the intrinsic record in order to derive its meaning. *Id.* (“The importance of the intrinsic evidence reaches its zenith in cases like this when the district court finds from the extrinsic evidence that the term lacks an ordinary meaning.”); *see also Iridescent Networks, Inc. v. AT&T Mobility, LLC*, 933 F.3d 1345, 1351 (Fed. Cir. 2019)(for “a coined term that has no ordinary meaning in the industry,” the court

should “look first to the specification, followed by the prosecution history, to determine the meaning” of the term). In reviewing the intrinsic evidence, including the only disclosures in the specification as to this claim term, it is clear that the term “consistent” in and of itself, as well as the ’493 patent’s teachings related thereto, inherently involve terms of degree. Schmidt ¶¶ 105. However, the ’493 patent fails to provide sufficient objective boundaries by which a POSITA can determine the scope of this claim limitation. Schmidt ¶¶ 105-106; *see In re Walter*, 698 F. App’x 1022, 1026 (Fed. Cir. 2017); *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014); *Unwired Planet L.L.C. v. Google, Inc.*, 660 F. App’x 974 (Fed. Cir. 2016); *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1363–64 (Fed. Cir. 2018).

First, the claims themselves say nothing about what “consistent” or “consistency” means; rather, they only state that a pattern of consistent usage is “determine[ed],” and that the “scheduling information for transmission of the message to the user” is based in part on the “determined pattern of consistent usage.” Schmidt ¶¶ 106-108.

Next, the specification expressly defines a pattern of consistent usage as being a term of “degree,” *i.e.*, the specification states that the pattern of consistent used is based on applying a set of [unspecified,] predefined rules to the timing information, that ***the user’s usage*** of an online service ***is free from variation to a certain degree for a certain time window.*** Schmidt ¶¶ 99-113; *see* Ex. 493-1, 3:1-5; *see also id.*, 4:48-50 (“consistency rules can be based on the amount of variation in timing information over a certain period of time”), 11:46-48 (“A consistency rule can be based on the lack of variance in data point time values over a period of time”). While the specification does disclose examples of what may reflect a pattern of consistent usage (*id.* at 4:56-5:5; 11:48-50), the specification fails to provide sufficient guidance to one of skill in the art as to what may be *objective* boundaries for an acceptable freedom of variation for what degree for what

time period, and instead speaks only in terms of generalities and leaves the requisite level of freedom of variation to the implementer. Schmidt ¶¶ 99-113.

Standard dictionary definitions, to the extent relevant, also lend no assistance to a POSITA, and instead only highlighting the personal subjectivity of what constitutes “consistent” and/ or “consistency.” Schmidt ¶¶ 99-113. For example, dictionaries define “consistent” as “in agreement or harmony, in accord; compatible” or “holding always to the same principles or practice” (Ex. 493-3), or “holding to the same principles” or “in agreement” (Ex. 493-4). Dictionaries similarly define “consistency,” as “agreement; harmony; logical connection” or “agreement with what has already been done or expressed; conformity with previous practice” (Ex. 493-3) and “being consistent” (Ex. 493-4). These definitions show that these are terms of degree with no objectively defined bounds. Schmidt ¶¶ 102-108.

In the alternative, if “consistent” is not indefinite (though it is a term of degree without specific boundaries in the specification) then the “determining ... a pattern of consistent usage from the timing information” limitation should at the least be defined in accordance with the disclosure in the specification, which is the only guidance as to the meaning of this term for a POSITA. *IQASR*, 825 F. App’x at 904; *see* Schmidt ¶¶ 102-108. The specification states that the schedule is consistent when it is based on “collected information about the user’s usage [that] is free from variation to a certain degree for a certain time window.” Schmidt ¶¶ 105-108; *see* Ex. 493-1, 3:1-5, 11:46-48. For example, the mechanism disclosed in the specification for determining whether a pattern of usage is “consistent” is through application of a set of “consistency rules,” or “a set of predefined rules” to the timing information, which rules can be “based on the recentness of the data points, the consistency of the data points, or other criteria that reflect when a user is using the online service.” Schmidt ¶¶ 105-106; *see* Ex. 493-1, 9:1-8, 11:48-56.

For substantially the same reasons as set forth with respect to “pattern of consistent usage,” the phrase “a consistency of the determined pattern of consistent usage” is likewise indefinite. The claims themselves provide no guidance as to what a “consistency” of a “pattern of consistent usage” is, much less how to determine the boundaries of whether a given pattern of consistent usage has sufficient “consistency.” Rather, the claims only states that the scheduling information is generated not only based on a determined pattern of consistent usage, but further, on the “consistency” of that determined pattern of consistent usage. Schmidt ¶¶ 104-106.<sup>5</sup>

Similarly, the specification further describes “a consistency of the determined pattern of consistent usage” in terms of “a[n unspecified] *set of criteria* that requires that the determined pattern *be consistent for at least a certain period* of time.” Ex. 493-1, 9:13-25 (emphasis added); Schmidt ¶¶ 111-112. The specification further states that “[t]he consistency level can be determined by statistics based on a correlation of historical data in combination with the recent usage pattern” and that this “level can be greater (e.g., more accurate) with more consistent data,” but again fails to provide sufficient guidance to a POSITA as to the objective boundaries as to what level of consistency the pattern of consistent usage must have for what “certain period of time,” “tolerance range,” or “time window.” See Ex. 493-1, 11:44-62.

In the alternative, if “a consistency of the determined pattern of consistent usage” limitation is not indefinite regardless of the fact that it is a term of degree without specific boundaries, then this limitation should be defined as “the extent to which the pattern of consistent usage is within a certain tolerance range or time window based on the predefined rules applied to the timing

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<sup>5</sup> The claim does make clear however, that a “pattern of consistent” and a “consistency of a determined pattern of consistent usage” must be two separate elements that are used in connection with generating the scheduling information. See, e.g., *Newell Window Furnishings, Inc. v. Springs Window Fashions Div., Inc.*, 15 F. App’x 836, 841 (Fed. Cir. 2001).



information,” which is the only guidance for a POSITA as to the meaning of this term. Schmidt ¶¶ 103-107; *see* Ex. 493-1, 4:48-58, 9:13-25, 11:56-62.

#### **E. The '411 patent**

The '411 Patent is directed to “systems and methods of providing content to a terminal having a limited display area for presenting such content. Ex. 411-1, 1:17–19. As described therein, mobile devices of the time (e.g. “internet-enabled mobile phones,” “PocketPC and palm-based computers”) lacked the “storage capacity, memory, bandwidth, and [] large ... display” required to download and display e-mail attachments (e.g., “normal application files—such as Powerpoint files, images, etc.”). *Id.*, 1:58–65, 2:10–13, 17–19, 38–40. Instead, these devices purportedly would “render [such content] in an extremely slow and/or inconvenient manner,” *id.*, 9:44–45, for example, breaking up “large source documents into smaller parts because transmitting long documents at once over slow wireless networks can try the patience of users,” *id.*, 2:40–43.

To address this problem, the '411 patent discloses systems and methods for reformatting mobile content, before delivery, into a well-known “vectorized” format (which were prevalent in the prior art at the time), such as Scalar Vector Graphics (“SVG”). *Id.*, 10:21-30. More particularly, to implement the described methods of delivering such reformatted content, the '411 patent further discloses use of a “messaging gateway” to deliver this reformatted content from a first network environment to an apparatus in a second network environment. *Id.*, 3:40–46. As illustrated in Figure 4, the messaging gateway is between the source in a first networking environment and the destination in a second networking environment. The messaging gateway receives, from the source, vectorized content intended for a mobile device, and then provides that content to the destination client for rendering and display. *Id.*, 10:12–34; 35–41.

In addition to the reformatted content, a destination address of the mobile device for which the reformatted content is destined is sent to the messaging gateway. *Id.*, 10:55–63; *see also* Ex.

A; Schmidt ¶¶ 46-56.

**1. “messaging gateway” (Claims 1, 10, 18)**

<b>Salesforce’s Proposed Construction</b>	<b>WSOU’s Proposed Construction</b>
“a device or program to connect disparate computer network environments and deliver content from the first network environment to a specific apparatus in the second network environment.”	Plain and ordinary meaning

Salesforce’s construction of “messaging gateway” accords with the express limiting statements in the specification, making clear that content is delivered from the first network environment to a specific apparatus in the second environment, and that the first and second network environments are different.

First, the claim language supports this construction. The term “gateway” itself has a plain and ordinary meaning to a POSITA: “a device or program used to connect disparate computer networks,” Ex. 411-2; and a gateway “both transfer[s] information and convert[s] it to a form compatible with the protocols used by the receiving network”. Ex. 411-3.

Next, the claim language further identifies the two disparate networks that the claimed messaging gateway interfaces between: a first network environment and a separate, second network environment. *E.g.*, Ex. 411-1, Cl. 1 (“interfacing, via a messaging gateway, a first network environment and a second network environment”). Because the claim language separately calls out these two elements, a POSITA would understand that this necessarily refers to two separate networks. *See Hill-Rom Servs., Inc. v. Matal*, 716 F. App’x 996, 1001 (Fed. Cir. 2017). The claim language further makes clear that the messaging gateway does not merely deliver the content generally to the second network environment, but specifically targets “an apparatus within the second network environment.” And that the “addressing information” of the claim is associated with that targeted apparatus. *E.g., id.*, Cl. 1 (the messaging gateway “receive[s] from

the first network environment ... addressing information associated with an apparatus within the second network environment”). That is, the claim targets a device, not a user.

The specification further confirms that a messaging gateway connects two different networks. As stated in the “Summary Of The Invention,” the messaging gateway transfers “content *from a fixed network*, typically, personal computer (PC), environment *to a destination, such as a mobile terminal, operating in a different network and computing platform.*” *Id.*, 2:49–52 (emphasis added). Statements in the “Summary of the Invention” routinely limit claim scope. *See, e.g., TriStrata, Inc. v. Microsoft Corp.*, 594 F. App’x 653, 656 (Fed. Cir. 2014). The specification further consistently repeats how the messaging gateway “*interfac[es] between the fixed network environment and the [second] cellular network environment.*” Ex. 411-1, 9:55–57; *see id.*, 3:6–4:6; 9:45–57; 10:35–39.

The specification also makes clear that the claimed messaging gateway receives content (which was reformatted in the first network environment) from the first network environment to ultimately be delivered *to a specific apparatus* in the second (cellular) network environment. First, the “Background Of The Invention” notes that conventional methods of transferring application files to a user of a mobile device as e-mail attachments suffered from numerous drawbacks:

If the user has a mobile terminal such as a “smartphone” or a Communicator-type of device, the device can also be used to access additional data over e-mail in e-mail attachments. However, **downloading e-mail attachments can be time consuming and expensive, since normal application files—such as Powerpoint files, images, etc.—are not optimized for mobile delivery and use, and therefore can be relatively large, thus resulting in long download times. Viewing e-mail attachments also requires that the user’s mobile terminal be equipped with suitable viewing applications,** which support the received application data type and version.

As can be seen from the foregoing, **the present solutions** for augmenting voice calls with images, data or other value added information, **disadvantageously involve many pre-requisites—such as having a laptop, modem access or pre-installed viewing applications—and many phases for setting up a data connection and downloading the information.**

Such statements in the specification that are used to distinguish or disparage prior art constitute a disavowal of claim scope, here sending content by email to a user. *See, e.g., Chicago Bd. Options Exch., Inc. v. Int’l Secs. Exch., LLC*, 677 F.3d 1361, 1372 (Fed. Cir. 2012).

As further described in the “Summary Of The Invention” the addressing information for the apparatus in the second (cellular) network environment is for a specific device in that network. The specification further repeatedly confirms how the content is ultimately sent by the messaging gateway to a specific mobile terminal with a specific address, which does not include sending the content by, for example, email to a user on any number of unspecified devices. *See id.*, 4:18–22 (“By providing the address of the terminal, the messaging gateway can signal (*e.g., using the cellular network* and its services) to the destination **based upon the address** (*e.g., mobile telephone number, SIP address, etc.*).”); *see also id.*, 3:35–39 (“[T]he messaging gateway can be capable of signaling the mobile terminal at least partially across a cellular network, such as in accordance with the Short Messaging Service (SMS) or Session Initiation Protocol (SIP).”); 4:18–22 (“By providing the address of the terminal, the messaging gateway can signal (*e.g., using the cellular network* and its services) to the destination **based upon the address** (*e.g., mobile telephone number, SIP address, etc.*).”); FIG. 5 steps 88 and 90; FIG. 6; 2:59–63; 3:21–25; 4:16–22; 9:27–34; 10:55–11:2; 12:11–14; 12:57–62.

#### F. The ’060 patent

The ’060 patent is directed to systems and methods for “using ... historic communications data” to provide to the “user contextual information regarding a communication before the user takes action concerning the communication.” More particularly, the ’060 patent notes that, at the time thereof, “Caller Line Identification (CLI)” was a well-known and “common feature” in telecommunication networks for “help[ing] the recipient of an incoming communication identify

the originator of the communication before the communication is accepted.” Ex. 060-1, 1:17–19, 27–30. The ’060 patent disclosure notes that such CLI functionality can be of particular benefit to “[e]nterprise workers, especially those working in Sales, Marketing and other functions that might require a lot of one-time contact with individuals.” *Id.*, 1:32–36. Accordingly, the systems and methods of the ’060 patent leverage such CLI functionality to purportedly “provide an improved telephone user experience especially for such enterprise workers,” by displaying prior call data for calls associated with the caller identification upon receipt of a call. *Id.*, 1:40–50. The patent proposed a method of using logs, which “provide a history of prior communications and attempted communications,” where each log “associates a record of events that identifier for each of a plurality of identifiers.” *Id.*, 3:2–7. The patent further proposes that “[e]ach time a particular communication events occurs, the event is analyzed to determine if there is an identifier associated with the event” and “if there is the log associated with the communication event type.” *Id.*, 3:8–15. This obtained log data is used “to create an alert for the incoming telephone calls” and to “present contextual information based on the obtained log data” to help the user. *Id.*, 4:30–37.

**1. “event” (Claims 1, 5, 8, 9, 11, 17, 18, 21)**

<b>Salesforce’s Proposed Construction</b>	<b>WSOU’s Proposed Construction</b>
“communication associated with an identifier”	Plain and ordinary meaning

The Court should adopt Salesforce’s proposed construction because it is reflective of the intrinsic record, including the claims themselves, as well as the overall context of the invention as set forth in the specification. WSOU’s unspecified plain and ordinary meaning construction is likely to lead to jury confusion in view of the conventional understanding of the term “event” outside the particular technical context of the ’060 patent. *See, e.g., Sulzer Textil A.G. v. Picanol N.V.*, 358 F.3d 1356, 1366 (Fed. Cir. 2004)

The claim language supports Salesforce’s proposal. First, a POSITA would understand

that the term “event” as used in the claim has a well understood meaning of “[a]n unsolicited communication from a hardware device to a computer operating system, application, or drive.” *See* Ex. 060-2. Consistent with this understanding, the surrounding claim language of independent claims 1 and 17 confirms that “events” are specifically tied to communications (*e.g.* “incoming telephone calls”) that are “received, at a communication device” and that contain “identifiers.” These identifiers are necessary to “update the data associated with the included identifier in one or more logs” with the communication event (*i.e.*, the data relating to the incoming telephone call associated with the identifier) as expressly recited in the claims.

The specification further confirms that the entire context of the ’060 patent, as reflected in the Field of the Invention and Background to the Invention, is directed to “communications” and the use of “historic communications data.” ’060 Patent, 1:7-36. *See, e.g., TriStrata, Inc.*, 594 F. App’x at 656; *St. Isidore Rsch., LLC v. Comerica Inc.*, No. 2:15-CV-1390-JRG-RSP, 2016 WL 4988246, at \*9 (E.D. Tex. Sept. 19, 2016) (construing “event” to mean “verification request” on the basis of intrinsic evidence). All of the examples of events disclosed in the specification, including attempted calls, successful calls, missed calls, answered calls, received message, sent message, received email, sent email, and calendar—are communications. 060-1, ’060 Pat., at 3:16-4:18. The specification further repeatedly uses the term “event” to describe a “*particular* communication event,” which further supports Salesforce’s construction. *Id.*, at 3:8-10 (emphasis added); *see also id.*, at 6:28-29 (“last communication events”); *id.* at 6:34-35 (same). *See CSP Techs., Inc. v. Sud-Chemie AG*, 643 F. App’x 953, 957 (Fed. Cir. 2016).

Moreover, the specification explains, consistent with the express requirement of the claims, that such communication events are associated with an identifier. *See, e.g.,* Ex. 060-1, 3:6-7 (“A log associates a record of events that involve an identifier for each plurality of identifiers.”); 3:8-

12; 3:16-20; 3:21-26; 3:27-31; 3:32-37; 3:38-43; 3:44-52; 3:52-62; 3:63-4:7; 4:8-17. The specification further explains how these identifiers are necessary both to store data related to communication events in logs, as well as to automatically update those logs based on incoming telephone calls that are associated with an identifier. *Id.*

## 2. “log(s)” (Claims 1, 2, 3, 11, 17, 21)

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
“a logically or physically separate data store that provides a history of prior communications and attempted communications of a single event type and is automatically updated without user input”	Plain and ordinary meaning

A POSITA would recognize in view of the intrinsic record and the understanding of a POSITA that “logs” as used in the ’060 patent are (i) logically or physically separate data stores that (ii) provide a history of prior communications and attempted communications of a single event type and (iii) are automatically updated without user input. More particularly, the patentee acted as his own lexicographer by expressly defining the term “logs”:

***logs provide a history of prior communications and attempted communications. Each log is a logically or physically separate data store associated with a different communication event type.*** A log associates a record of events that involve an identifier for each of a plurality of identifiers.

Ex. 060-1, 3:2-7 (emphasis added); *see also id.*, at 4:36-40 (“The processor then updates the logs of historic communication data so that the incoming call 8 is recorded in one or more of the logs.”); 5:9-11 (“The logs, in combination, are a history of attempted and/or successful communications involving the device or the user of the device.”).<sup>6</sup> *See, e.g., Scripps Rsch.*, 782 F. App’x at 1022;

<sup>6</sup> Further, a POSITA would recognize that the use of the term “log” necessarily implicates a record of past activities of a particular type, in this case, communication events. *See, e.g., Ex. 060-3* (“Log”: a log is “[a] record of computer processing operations”) [SFDC00019041 - SFDC00019041]; *Ex. 060-4* (Log is “[a] record containing details of past activities or actions on

*see also SkinMedica*, 727 F.3d at 1200.

The remainder of the intrinsic disclosure is consistent with this express definition. For example, Figure 1 further illustrates that logs are a “logically or physically separate data store” – with each box within data point 24 being a separate and unique log. As described in the corresponding disclosure of the specification, 24A corresponds to a log of a first communication event type (an “attempted calls data store”), 24B corresponds to a log of a second communication event type (a “successful calls data store”), etc. Ex. 060-1, 4:16-4:17.

Further, the express claim language dictates that logs are “updat[ed], automatically, without user input, by a processor of the communication device.” Consistent with this claim language, the applicant disavowed any claim scope by which logs are not required to be automatically updated. More particularly, the application that led to the ’060 patent was rejected based on prior art that disclosed a user’s ability to manually modify “information about the originator of the call.” *See* Ex. 060-6. Applicant distinguished its invention as novel over this art because the invention “update[s] ***automatically without user input***, e.g., personal data of the originator of a phone call or communication.” *Id.* (emphasis in original). Such amendment and argument to overcome prior art represents a clear disavowal of claim scope. *Accord SpeedTrack*, 998 F.3d at 1379; *Nite Glow Indus. Inc. v. Cent. Garden & Pet Co.*, No. 2020-1897, 2021 WL 2945556, at \*11 (Fed. Cir. July 14, 2021).

### **G. The ’731 patent**

The ’731 patent relates to Caller ID features in telecommunications, and “in particular to providing caller flexibility on ‘name’, ‘number’, and ‘message’ for a calling terminal that is displayed on a called terminal.” Ex. 731-1, Abstract, 1:7–9, 1:42–2:10, 2:58–62, 3:58-4:6, 4:38–

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a computer system.”); Ex. 060-5 (“Log is “[a] record kept of the activity or performance of a device, piece of equipment, or system.”).



5:3. As described therein, then-current Caller ID systems “provide[d] limited control to an end user/operator on what is displayed at the called party device” and could not “be programmed to, based on the time and day, provide a specific caller name and/or a specific caller number and/or a specific caller message.” *Id.*, 2:12–13; 2:17–19, 4:58–5:3.

The ’731 patent purports to solve this by providing “caller flexibility” for the calling terminal with respect to the information to be displayed on a called terminal, such that a calling party can “use at least one of an alternate caller name, an alternate caller number and an alternate caller message for a calling terminal, instead of a preassigned caller name and caller number,” (hereinafter “alternate Caller ID values”). *Id.* 1:7–9, 2:24–51; 3:58–4:6; 4:29–57.. For example, a telemarketer “mak[es] a call from a home number [] on behalf of F&D Services ....” In this example, “[t]he caller may have the F&D Services number [] displayed at the called party screen instead of the limited traditional choice [of the telemarketer’s home number.” *Id.* 3:48–52. The described and claimed systems further encompass “altering ... the number/name/message not just on a per call basis, [but that] a fixed set of settings may be invoked based on a day and/or a time.” *Id.* 4:25–28; *see also id.* at 2:17–19, 3:52–57; 4:22–28

**1. “calling terminal” (Claims 1, 2, 7-11, 16-17) / “called terminal” (Claims 10, 11)**

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
“calling terminal” “a device that originates a call”	Plain and ordinary meaning
“called terminal” “a device to which a call is directed”	Plain and ordinary meaning

Salesforce’s constructions accurately reflect that a “calling terminal” is “a device that originates a call,” as differentiated from a “called terminal” which is “a device to which a call is directed. Salesforce addresses these terms together for efficiency.

As a preliminary matter, the claims explicitly differentiate between a “calling terminal” and a “called terminal.” *See* Ex. 731-1, Cl. 10, preamble: “A method for network support for providing *caller flexibility information of a calling terminal* that is *displayed on a called terminal*” (emphasis added). The presence of each of the differentiated terms “calling terminal” and a “called terminal” within a single claim occurs throughout the ’731 patent, confirming they are distinct. *See id.* Cls. 10, 11, 13, 18, 19. This is consistent with the understanding of one of skill in the art at the time of the purported inventions as to the meaning of these two terms. *See* Ex. 731-2, 80 (SFDC00019101) (“called party”: “An entity, such as a person, equipment, or program to which a call is directed.”), *id.*, 81 (SFDC00019102) (“calling party”: “An entity, such as a person, equipment, or program that originates a call.”); Ex. 731-4, 143 (SFDC00019108) (“Calling Party”: “The person who makes (originates) the phone call.”).<sup>7</sup>

The specification further delineates “calling terminal” and “called terminal” in describing traditional Caller ID functionality: “caller ID signals are sent to a called modem or a telephone when a call is made to the called telephone number. The *caller ID signals provide the called telephone or modem with identification of the calling telephone.*” Ex. 731-1, 2:1–6 (emphasis added). The specification describes the alleged invention using similar terminology: “The flexible caller ID module 109 *allows calling terminals to subscribe to an operator service* that allows them to display at least one of an identified substitute name, substitute number and substitute message [...] *on the called terminal.*” *Id.* 3:42–57 (emphasis added).<sup>8</sup>

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<sup>7</sup> *See also, generally,* Ex. 731-2 at 80-81, 522 (SFDC00019099 - SFDC00019105); at 80 (SFDC00019101) (“caller ID (CLID)”), at 81 (SFDC00019102) (“calling device”); Ex. 731-4, Newton’s Telecom Dictionary (19th Ed.) (2003) at 143 (SFDC00019108) (“Caller Name,” “Calling Party Identification”).

<sup>8</sup> Other cases construing such terms are in accord with Salesforce’s construction. *See, e.g., Intell. Ventures I LLC v. Check Point Software Techs. Ltd.*, No. CIV.A. 10-1067-LPS, 2012 WL 6200337, at \*11 (D. Del. Dec. 12, 2012).

In light of the extensive guidance regarding and clear differentiation between “calling terminal” and “called terminal” in the specification (which differentiation is further necessary for the understanding of the “changeable by at least one of ...” limitation below, WSOU’s proposed plain and ordinary constructions should be rejected. *See Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1321 (Fed. Cir. 2016); *see also Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1382–83 (Fed. Cir. 2011).

**2. “changeable by at least one of the calling terminal and a network” (Claims 1, 10, 16)**

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
“changeable by a device that originates a call or a network supporting that device”	Plain and ordinary meaning

The intrinsic evidence supports Salesforce’s construction. First, the claim language confirms that it is the **calling** terminal or a network on its behalf that controls alternate Caller ID values, not a called terminal. *See, e.g.* Ex. 731-1 Cl. 10 (“...providing caller flexibility information of **a calling terminal** that is displayed on a called terminal”; Cl. 12 “The method according to claim 10, wherein the command is **entered by the calling terminal.**”) This distinction between operations performed by the “calling terminal” and “called terminal” is apparent in the claims (*see* § III.G.2, *supra*), which specify that alternate Caller ID values are controlled by a calling terminal or a network supporting it. *Accord Aerotel, Ltd. v. T-Mobile USA, Inc.*, No. 2010-1179, 2010 WL 5376233, at \*3 (Fed. Cir. Dec. 20, 2010). Nowhere do the claims suggest that a **called** terminal controls alternate Caller ID values.

The specification further supports that only a calling terminal or a network on its behalf controls alternate Caller ID values. In view of the calling party/called party distinction, the patent’s disclosed solution of “providing **caller** flexibility on ‘name’, ‘number’, and ‘message’ **for a calling terminal** that is displayed on a called terminal” is clearly a caller-side functionality. Ex. 731-1,

1:7–9 (emphasis added); *see also* Abstract, Fig. 2, Fig. 3, 2:24–51, 3:42–52, 3:58–4:6, 4:38–57. Indeed, the specification, like the claims, is explicit that “[t]he command may be entered by the calling terminal or by the network,” (*id.* 4:7–9, *accord id.* at 3:64–4:64:10–21; 4:39–57), while it nowhere discloses called party command entry, or any connection between the called party and the network. As with “calling terminal” and “called terminal”, *above*, WSOU’s construction should be rejected due to the clear connection of caller flexibility to a ‘calling terminal’ as opposed to a ‘called terminal.’ *See Eon Corp.*, 815 F.3d at 1321; *Typhoon Touch*, 659 F.3d at 1382–83.

**3. “looking up, based on at least one of a hour, minute, second and day”  
(Claims 1, 10)**

<b>Salesforce’s Proposed Construction</b>	<b>WSOU’s Proposed Construction</b>
“looking up based on a particular point in time defined by at least an hour, minute, second, or day (as opposed to an appropriate time)”	Plain and ordinary meaning

Salesforce’s construction is dictated by the intrinsic evidence, including in particular an applicant’s express disavowal of claim scope during prosecution in connection with applicant’s arguments to overcome prior art, wherein the applicant clearly defined and limited this term to refer to a particular point in time, as opposed to an appropriate time.

The claim language requires “looking up [Caller ID values] based on at least one of a hour, minute, second and day”. Ex. 731-1, Cls. 1, 10. This language was directly at issue during prosecution of the application that led to the ’731 patent. After a first amendment, the pending claims included a “time and day” limitation, *i.e.*, the corresponding limitation read “looking up, based on at least one of a time and day ...”. Ex. 731-5, 2008-09-17 Claims. The Examiner rejected the claims, finding U.S. Patent No. 6,343,120 (“Rhodes”) (Ex. 731-6) disclosed “looking up, based

on at least one of a time and day.” Ex. 731-5, 2008-10-22 Final Rejection at 3.<sup>9</sup>

In attempting to overcome this rejection, the applicant argued that “time” as used in the ’731 patent specifically refers to a particular point in time as opposed to Rhodes, which “discloses looking up calling party identification based on an appropriate time, *not a particular point in time*.” *Id.* 2008-12-12 Response to Office Action at 10-11. The applicant then amended its claims by replacing the word “time” with the phrase “hour, minute and second” to more make even more clear this limitation was referring to a particular point in time (as reflected in the accompanying argument). *Id.*, 2009-01-22 Amendment at 2, 10 (“Rhodes’ reference to “time,” however, refers to an appropriate time, not at least one of a hour, minute, second and day.”). The Examiner then allowed the patent in view of applicant’s amendment and argument. *See id.*, 2009-02-11 NOA. Accordingly, based on both argument and amendment, the applicant expressly disavowed any claim scope that would rely on an appropriate time as opposed to a point in time. *See SpeedTrack*, 998 F.3d at 1379; *Nite Glow*, 2021 WL 2945556, at \*11. The specification is consistent with and further supports that “hour, minute, second and day” refer to a particular point in time, by claiming as a drawback that “[t]he prior art also cannot invoke a fixed set of settings based on a day and/or a time.” Ex. 731-1, 2:17–19; *see also id.* at 3:52–57; 4:22–28.

WSOU’s proposed plain and ordinary meaning of this term requiring no construction should be rejected, in view of the outstanding dispute between the parties as to its meaning, and the applicant’s prosecution history disclaimer. *See Cobalt Boats, LLC v. Brunswick Corp.*, 773 F. App’x 611, 616 (Fed. Cir. 2019). Allowing WSOU to obtain a broader construction would allow improper recapture of claim scope that the applicant disavowed. *SpeedTrack*, 998 F.3d at 1379.

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<sup>9</sup> The Examiner relied on the disclosure of Rhodes at 5:31–6:8 (Ex. 731-6), disclosing Caller ID flexibility “to allow calling parties to customize their identifications to meet needs as they arise for different callers at different times.”

## H. The '892 patent

The '892 Patent is directed to methods of “providing access to presence information,” where “[p]resence information refers to private user data [for a user of a telecommunication device] which gives information and hints about a user's current state, including location, availability and mood.” Ex. 892-1, 1:17–21. As described therein, the then-current “generation of wired and wireless telephones can indicate to a caller the status of a call recipient in only crude and potentially ambiguous terms,” such as receiving no answer, simply being allowed to leave a message, or a call being forwarded.

However, the '892 patent disclosure notes that such conventional presence systems suffered from a perceived lack of control that the user has over his Presence information.” *Id.*, 2:13–23. Accordingly, the '892 Patent proposes methods to enable a user to block or allow other users to receive access to their presence information and to log this access or denial. In this way a user is able to both control and monitor access to their presence information. *Id.*, 2:26–53.

### 1. The claimed order of steps 1-4 is limiting

“[A] claim ‘requires an ordering of steps when the claim language, as a matter of logic or grammar, requires that the steps be performed in the order written, or the specification directly or implicitly requires’ an order of steps.” *Mformation Techs., Inc. v. Rsch. in Motion Ltd.*, 764 F.3d 1392, 1398–99 (Fed. Cir. 2014) (citing *TALtech Ltd. v. Esquel Apparel, Inc.*, 279 Fed.Appx. 974, 978 (Fed. Cir. 2008) and *Function Media, LLC v. Google, Inc.*, 708 F.3d 1310, 1320 (Fed. Cir. 2013)). Here the order of steps in claim 1 follow from logic, grammar, and the intrinsic record.

Claim 1 has seven basic steps where the first four have a specific order, 1) “stor[ing],” 2) “receiv[ing] a request,” 3) “allow[ing] or deny[ing] access,” 4) “log[ging] the identity.” Ex. 892-1, Cl. 1. Each of these steps relies on information or data from the prior steps and as such must be performed in order. The first and second steps are to store presence information, and then receiving

a request to access said information. *Id.* It would not make sense to receive a request for information that is not stored or does not exist, thus the receiving request step must occur after the store step. The third step is to allow or deny access to said information, and similarly cannot be performed before a request is received, as there would be nothing to allow or deny. Step 4 logs the identity of the requesting entity each time it “requests, accesses, or is denied access” and must occur after the access is granted or denied. If step 4 occurred prior to this grant/denial it would only log at the time of the request and this would not give full meaning to the term.

Further, in overcoming prior art, the applicant emphasized the order of these steps. *See SpeedTrack*, 998 F.3d at 1379 (Fed. Cir. 2021). The applicant explained “an entity makes a request for presence information,” step 2, “[f]ollowing this, an initial check is made to determine whether to all or deny access to the requesting entity,” step 3. Ex. 892-2, 8. “Following this, an entity which passes the initial test[, Step 3,] is allowed access to presence information. . . . The system generates a log of all entities which access presence information as well as those entities which have been denied access to presence information.” *Id.* The applicant goes on to explain “[t]his system is clearly quite different to that disclosed by [Prior art].” *Id.*

## **I. The ’320 patent**

The ’320 patent is directed to presenting content and services through website menus based on the location of user devices. *See, e.g.*, Ex. 320-1, Abstract, 3–6; 1:24–32; 7:25–27. The ’320 patent purports to address problems with navigation bars in web pages, including that they were “static” and could not “react to contextual changes that may affect content.” *Id.*, 1:13–17. It purports to overcome this problem by “provid[ing] available services based, at least in part, on location information.” The alleged solution specifically involves, *inter alia*, “selecting [] menu items associated with two or more different services based on the location information, determining a language based on the location information, [...] [presenting] menu items []

associated with the two or more different services that are available to the device based on the location information, and [presenting] at least one menu item associated with the two or more different services [] in a manner indicating that the at least one menu item is unavailable to the device at the location indicated by the location information associated with the device.” *Id.*, Cl. 1.

**1. “presented in a manner indicating that the at least one menu item is unavailable” (Claims 1, 10)**

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
“graphically depicting a previously selectable menu item that cannot be selected; removing the menu item is not graphically depicting”	Plain and ordinary meaning

Salesforce’s construction reflects the understanding of this term to a POSITA in view of the claim language, express definitional statement in the specification, and explicit disclaimer during prosecution, whereas WSOU relies on improper unstated plain and ordinary meaning.

The claim language confirms the claims require an affirmative graphical depiction of an item with that graphical depiction reflecting that the item cannot be selected. Independent claims 1 and 10 both require a menu item be “***presented in a manner indicating that*** the at least one menu item is unavailable...”. (emphasis added.) The use of “presented” alone (*see* Ex. 320-1, Cls. 1, 7, 10, 16) confirms Salesforce’s construction—to be ‘presented’ a menu item must be offered to view, or shown. Indeed, other courts that have considered substantially the same issue regarding the use of the term “presented” have likewise concluded that the term “presented” requires an affirmative depiction that is visible to a user: “[i]t would be strange to say that an [item] is ‘presented to’ a user [...] if the user is not in a position to view the [item].” *Meade Instruments Corp. v. Yamcon, Inc.*, 197 F. App’x 929, 932 (Fed. Cir. 2006). Accordingly, removing a menu item could not satisfy this limitation, as a removed item is not offered to view or visible—*i.e.* it is not ‘presented’—to the user.



This specification further confirms that an affirmative graphical depiction of a non-selectable item is required by this limitation. It directly equates, in a definitional manner, that the presenting of a menu item in a manner indicating that the menu item is unavailable is a functionality called “ghosting”: “the menu structure may show all of the installed services on the UE 101 during presentation of the menu items on the bridge, but ghost unavailable menu items and services. In this embodiment, *ghosting is presenting a menu item to show that the menu item is associated with the UE 101 (e.g., installed), but unavailable (e.g., non-selectable).*” Ex. 320-1, 10:52–7.<sup>10</sup> The term “ghosting” had a well understood meaning to a POSITA, which required affirmative graphical depiction of a non-selectable item by displaying the item in grey to reflect that the item is not currently available. *See* Ex. 320-2, Dictionary of Computing (5th Ed.) (2004) (pg. 150) (SFDC00019058) (“a menu item displayed in grey and not currently available”); Ex. 320-3, Dictionary of Computing (6th Ed.) (2010) (pg. 150) (SFDC00019061) (same). Further, the specification’s definition of ghosting as (“presenting a menu item to show that the menu item is associated with the UE 101 (e.g., installed), but unavailable (e.g., non-selectable),” Ex-320-1 at 10:56–57, closely tracks this term (“presented in a manner indicating that the at least one menu item is unavailable”). Because “this is simply a case where the patentee used different words to express similar concepts,” claims 1 and 10 similarly require “ghosting,” *i.e.*, an affirmative graphical depiction of an item that cannot be selected. *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1120 (Fed. Cir. 2004).

The prosecution history further confirms that the claimed “presented in a manner indicating that the at least one menu item is unavailable” is equivalent to and should be construed as

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<sup>10</sup> WSOU’s “plain and ordinary meaning” construction should also be rejected on this basis alone, as the patentee acted as its own lexicographer. *Scripps Rsch. Inst.*, 782 F. App’x at 1022.

“ghosting” as described above, and that the limitation is not satisfied by removing a menu item. More particularly, the original claims as filed did not include the “presented in a manner ...” limitation at issue. *See id.*, 2010-02-19 Original App. Specification at 32-35. The Examiner rejected the original claims and the applicant then amended the pending claims to include this term and its surrounding claim language (*i.e.*, “wherein at least one menu item associated with the two or more different services is presented in a manner indicating that the at least one menu item is unavailable to the device ...”) in order to overcome this prior art rejection. *See* Ex. 320-4, 2013-01-14 Amendment/Request for Reconsideration After Non-Final Rejection at 2. The Examiner nonetheless rejected this claim in view of the disclosure of U.S. Patent App. Pub. No. 2009/0178005 (“Jheng”) at para. 008, which taught that a menu item that was no longer available to the user was removed from the menu: “the menu item of the service menu is disabled or the menu item is removed from the service menu when the queried status indicates that the service is unavailable.” *Id.*, 2013-01-25 Final Rejection at 3-4.

In response, the applicant argued that the claimed “presented in a manner indicating that the at least one menu item is unavailable” was a distinguishing feature over Jheng, that a menu item does not satisfy this limitation when simply disabled or removed, *i.e.*, that “Jheng, at best, merely teaches that a menu item of a service menu is enabled when the queried status indicates that the service is available, and that the menu item of the service menu is disabled or the menu item is removed....”). *Id.*, 2013-03-25 Response After Final Action, Remarks at 7-8; *id.*, *In re Application of: Melanie LARSON et al.*, Appeal 2013-009756, App. Br. at 6; *see also id.*, Decision on Appeal at 5 (PTAB Oct. 28, 2015) (“paragraph 8 of Jheng ***teaches the presentation of a menu item that is unavailable***,” (emphasis added)). Accordingly, Applicant expressly disavowed any claim scope that would rely on removal of a menu item as graphically depicting that the item

cannot be selected. *See SpeedTrack*, 998 F.3d at 1379; *Nite Glow*, 2021 WL 2945556, at \*11.

In light of the above, WSOU’s plain and ordinary construction should be rejected because the meaning in the claim’s context would not be apparent to a jury absent construction. *See O2 Micro*, 521 F.3d at 1360; *Eon Corp.*, 815 F.3d at 1319; *Every Penny Counts*, 563 F.3d at 1383. Likewise, allowing WSOU to obtain broader construction (*i.e.* reading this claim as satisfied by removing a menu item) would improperly recapture scope disavowed in prosecution. *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012). Further, a plain and ordinary meaning would introduce ambiguity into this term and render the claims indefinite, by obscuring the meaning of lookup based on time such that one of skill in the art would not reasonably understand its bounds. *See TVnGO Ltd*, 2021 WL 2644227, at \*3 (Fed. Cir. June 28, 2021); *accord IQASR LLC*, 825 F. App’x at 906.

**2. “the menu items are associated with the two or more different services”  
(Claims 1, 10)**

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
“the menu items are each associated with at least two different services”	Plain and ordinary meaning

Salesforce’s construction flows from the intrinsic evidence and is necessary to resolve a potential grammatical ambiguity in the claim language. WSOU improperly relies on an unstated plain and ordinary meaning for a term without clear meaning absent the intrinsic disclosure.

The claim language confirms that this claim limitation requires that each of the individual menu items is associated with at least two different services (as opposed to menu items being collectively associated with two or more different services). More particularly, claims 1 and 10 require “selecting, via a processor, menu items associated with ***two or more different services*** based on the location information,” that “the ***menu items*** are associated with the ***two or more different services*** that are available to the device based on the location information,” and that “***at***

*least one menu item* associated with the *two or more different services*” is indicated as unavailable. It is clear from the claims’ consistent plural usage of “services”—even when describing “at least one menu item”—that Salesforce’s construction is accurate. *See Harari v. Lee*, 656 F.3d 1331, 1341 (Fed. Cir. 2011).

The specification further confirms that each menu item is associated with at least two different services, such as different versions of a music service with varied access to copyrighted or licensed content based on location. It describes how “the menu items may look identical, but lead to different services.” Ex. 320-1, 4:59–65. For example, “a music service may be available in both Canada and the United States, however, in Canada, the user may be entitled to unlimited access to certain music, while in the United States, the user may be entitled to limited access.” *Id.* The specification further explains that “due to licensing agreements, media services may have different content (*e.g.*, audio and video files) available in Canada than in the United States. In another example, regulatory issues, such as restrictions in Indonesia or India that limit online file sharing services may limit accessibility of content.” *Id.*, 4:54-59. These examples all refer to variable content access, based on location, to different version of a service—*i.e.* a music or file sharing service. Directly after the these variable content access examples, the specification teaches: “When the user is presented the bridge and menu items on the web page, ***the user can provide input*** to the UE 101 ***to select one of the menu items***” and “menu items may be utilized to cause initiation of ***one of the services corresponding to the menu item.***” *Id.*, 4:66–5:4. In view of the ’320 patent’s alleged solution of “providing interface navigation information associated with the availability of services,” the specification teaches that each single menu item is associated with multiple services. *Id.* at Abstract.

The prosecution history provides further evidence each menu item must be associated with

two or more different services. The applicant expressly defined this term as such in an effort to overcome a rejection based on Jheng, arguing that reference failed to “describe at least *one menu item associated with two or more different services*.” See Ex. 320-4, 2013-03-25 Response After Final Action, Remarks at 7 (emphasis added). The applicant first amended its claims to include a list of “services,” then removed said list and revised the claims to specify that each menu item must be associated with “two or more different services.” See *id.* 2013-01-14 Amendment/Request for Reconsideration After Non-Final Rejection at 2. Based on this, the applicant argued that requiring “one menu item [be] associated with two or more different services” was a distinguishing feature over prior art. *Id.*, 2013-03-25 Response After Final Action, Remarks at 7-8. The applicant appealed and continued to maintain this position. See III.I.1 §, *supra*. The PTAB accepted applicant’s characterization of this term but rejected applicant’s argument that Jheng did not teach it. See Ex. 320-1, *In re Larson*, Decision on Appeal at 4-5. The applicant thus confirmed this term requires each menu item is associated with two or more different services, and disavowed any other scope. *Accord SpeedTrack*, 998 F.3d at 1379; *Nite Glow*, 2021 WL 2945556, at \*11.

Accordingly, WSOU’s proposed plain and ordinary meaning of this term requiring no construction should be rejected, in view of the outstanding dispute between the parties, and the applicant’s prosecution history disclaimer. See *Cobalt Boats*, 773 F. App’x 611. Further, a plain and ordinary meaning would introduce ambiguity into this term and render the claims indefinite, by obscuring that each menu item must be associated with “at least two different services.” See *Bushnell Hawthorne, LLC v. Cisco Sys., Inc.*, 813 F. App’x 522, 526 (Fed. Cir. 2020). Finally, allowing WSOU to obtain a broader construction would allow improper recapture of claim scope that applicant disavowed in prosecution. *SpeedTrack*, 998 F.3d at 1379.

#### **J. The ’899 patent**

The ’899 patent is directed to a system for interfacing web applications with packet-

switched networks for text messaging. Ex. 899-1, '899 patent, Abstract; 1:1-3; 1:7-9; 1:53-58.

The patent acknowledges that, at the time of the purported invention,

there may be web-based applications that allow an end user to send or receive text messages. For example, an end user may access a 3<sup>rd</sup> party web site for sending/receiving text messages. Through the 3<sup>rd</sup> party web site, the end user may enter a message intended for a recipient and a telephone number for the recipient. The web-based application then generates a send request for the text message using an Application Programming Interface (API) defined for web-based services. In another example, some social networking services (e.g., Facebook) may provide text messaging capabilities through a web site. When a user logs into his/her social network account, one option available to the end user may be to send/receive text messages.

*Id.* at 1:25-39. It further discloses that the “RESTful web API” (Application Programming Interface) was a well-known standard API for web applications, and that the Session Initiation Protocol (SIP) was one of many signaling protocols used in packet-switched networks. *See id.*, 1:40-46; 2:4-11; 3:29-33. The '899 patent asserts that an issue with RESTful APIs used for web services was that they purportedly did “not provide enough flexibility for today’s evolving networks,” including packet-switched networks. *Id.*, 1:47-49.

The '899 patent’s purported solution was a “conversion system” implemented between a web application and a packet-switched network. *See id.*, 3:6-33. The described system includes an “interface” configured to send and receive RESTful operations with a web application, and Session Initiation Protocol (SIP) requests with a packet-switched network. *See id.*, 1:53-63; 3:29-39. The patent further describes the system also having a “controller” that converts SIP requests to RESTful operations and vice versa. *See id.*, 3:29-33, 39-42; *see also* Ex. A; Schmidt ¶¶ 69-74.

**1. “Session Initiation Protocol (SIP) request” / “SIP request” (Claims 1-2, 6-9, 13-16)**

<b>Salesforce’s Proposed Construction</b>	<b>WSOU’s Proposed Construction</b>
“a message conforming to the request message format of the Session Initiation Protocol specification as set forth in RFC 3261	Plain and ordinary meaning.

published by the Internet Engineering Task Force”	
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The parties dispute whether explicit construction of “Session Initiation Protocol (SIP) request” is necessary. Salesforce’s construction aligns directly with the understanding of a POSITA in view of the intrinsic record, whereas WSOU’s construction leaves open a potential dispute as to the scope of the protocol for request messages as defined by the claims.

A POSITA would understand that, as used in the claims, “Session Initiation Protocol” (specifically designated with capitalization) refers to a defined protocol specification that was published as RFC 3261 by the Internet Engineering Task Force. *See* Ex. 899-3; *see* Schmidt ¶¶ 117-118. Further, the SIP specification discloses that SIP requests are a specific type of SIP message with its own format and set of parameters. *See* Ex. 899-3 at § 7.1. As a result, a POSITA would conclude that the term “SIP request” is a message conforming to the request message format of the SIP protocol specification as set forth in RFC 3261. Schmidt ¶¶ 117-118.

Consistent with this understanding, the specification expressly discloses that “SIP” refers to the Session Initiation Protocol. Ex. 899-1, 2:7-11; 3:29-33. Further, the specification describes in detail how a “conversion system” receives a RESTful operation containing an SMS message from a web application, “extracts address data and the SMS message from the . . . operation, and converts it into a SIP MESSAGE that encapsulates the SMS message.” *Id.*, 7:5-10, 59-61. Although the term “SIP request” does not appear within the specification, a POSITA reading the claims and specification would understand that the recited SIP MESSAGE corresponds to the claimed “Session Initiation Protocol (SIP) request.” *See* Schmidt ¶¶ 117-118.

## 2. “RESTful” (Claims 1, 3, 6-8, 10, 13-16)

Salesforce’s Proposed Construction	WSOU’s Proposed Construction
“conforming to the Representational State Transfer (REST) architectural style consisting	Plain and ordinary meaning.

of architectural elements and a set of constraints applied to the elements of the architecture”	
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The parties dispute whether the Court needs to construe the term “RESTful.” As with “SIP request,” construction of “RESTful” as conforming to the “Representational State Transfer” architectural style will aid the jury in determining the scope of the asserted claims and resolve any disputes as to the protocols encompassed within the scope of the claims.

Salesforce’s proposed construction of this technical term is consistent with the intrinsic evidence and the knowledge of a POSITA. Most particularly, the ’899 patent specification discloses and defines “REST” as referring to “Representational State Transfer (REST).” Ex. 899-1, 1:45-46. As a POSITA would understand, the REST architecture is a particular architecture created by Roy Thomas Fielding, which includes architectural elements and a set of constraints on those elements. *See* Ex. 899-5, Ch. 5 (Roy Thomas Fielding Ph.D. Dissertation); Schmidt ¶¶ 115-121. During the prosecution of the ’899 patent, the patentee expressly acknowledged that “RESTful is based on the Representational State Transfer (REST) architecture.” Ex. 899-4 at 7 (’899 FH, April 25, 2013 Office Action Response). A POSITA would therefore understand that the term “RESTful” in the ’899 patent would mean conforming to the Representational State Transfer architectural style consisting of architectural elements and a set of constraints applied to the elements of the architecture. *See id.* ¶¶ 115-121.

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

Pursuant to the Federal Rules of Civil Procedure and Local Rule CV-5, I hereby certify that, on November 1, 2021, all counsel of record who have appeared in this case are being served with a copy of the foregoing via the Court's CM/ECF system.

Dated: November 1, 2021

/s/ Scott Cole  
Scott Cole